Abstract

Learning the Braille script is not an easy task for Visually Impaired students. Visually Impaired
Electronic Progressive Braille Learning Kit for Blind (Low Cost, All Languages and Multiline Braille Screen)

students have to memorize/remember various patterns of keys of Braille matrix assigned for different letters/words/symbols in Braille script to read and write effectively. The electronic Braille kit is for helping them out with the more difficult stages of learning Braille to expand their knowledge and assistance in orientation and mobility. Braille Keypad, which can be used to help users learn Braille by tactile signals, and also hearing it read out to them. The keypad allows visually impaired users to enter Braille characters into the system easily for different use and works. The integration of physical activity and hearing can facilitate easy learning of Braille Script (all languages). It consists of a keypad same as Braille Cell which is based on the Braille matrix (3*2 matrixes) with two extra control keys. The user first listens to the instructions and gets the training from the kit, then enters the combination of keys in compliance with internationally accepted Braille matrix/script, the device in turn pronounces corresponding output of letter/word/symbols/contractions (flexible for all languages). Our project is an attempt to utilize technology to educate the visually impaired students.

References

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Index Terms

Computer Science
Learning Aid

Keywords

Braille Matrix  Tactile  Portable  Multi-lingual  Learning Aid  Teacher Independent
Hand Held

Multi-line Braille Screen.